

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A semiconductor passive Q-switch providing variable outputs suitable for use in a laser system to produce laser pulses having defined output characteristics including a lasing wavelength, said semiconductor passive Q-switch including variable transmittance means at the lasing wavelength for tuning said output characteristics of said laser pulses.
2. (Amended) A semiconductor passive Q-switch according to claim 1 wherein said output characteristics include pulse duration, pulse repetition rate, peak power and averaged output power of said laser pulses.
3. (Amended) A semiconductor passive Q-switch according to claim 1 wherein said variable transmittance means includes a wafer having two surfaces that are optically polished, one or both surfaces being optically coated to form a gradient variation of transmission at a wavelength substantially in the IR region.
4. (Amended) A semiconductor passive Q-switch according to claim 3 wherein said surfaces are optically coated to form a gradient variation of transmission at a wavelength in the IR region.
5. (Amended) A semiconductor passive Q-switch according to claim 1 wherein said variable transmittance means includes a material having variable thickness, such as a wedge.

6. (Amended) A semiconductor passive Q-switch according to claim 1 wherein tuning of said output characteristics is effected by translating the Q-switch in a direction transverse to the optical axis of the laser system.

7. (Amended) A semiconductor passive Q-switch according to claim 1 wherein tuning of said output characteristics is effected by moving the Q-switch in a curvilinear path.

8. (Amended) A semiconductor passive Q-switch according to claim 7 wherein said curvilinear path included circular rotation.

9. (Amended) A semiconductor passive Q-switch according to claim 1 wherein said Q-switch functions simultaneously as an output coupler of said laser system.

10. (Amended) A semiconductor passive Q-switch according to claim 1 including undoped GaAs.

11. (Amended) A semiconductor passive Q-switch according to claim 1 including doped or undoped semiconductor material having properties of saturable absorption in the IR spectrum.

12. (Amended) A semiconductor passive Q-switch according to claim 11 wherein said semiconductor material includes AlGaAs or InP.

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13. (Amended) A semiconductor passive Q-switch according to claim 1 having a multiple-quantum-well configuration.
